General Motors LLC 2525 E Abram 5t Arlington, TX 76010

March 11, 2013

Texas Commission on Environmental Quality Office of Permit Administrative Review Air Permits Division (MC-161) P.O. Box 13087 Austin, Texas 78711-3087

Re:

Clean Air Act Minor Title V Permit Revision Application (FOP O1151)

General Motors Arlington Assembly Plant

On July 16, 2013, the General Motors Arlington Assembly Plant was issued a revision to NSR Permit 19156. The primary purpose the issued revision was to incorporate a paint technology change that switched the basecoat portion of the topcoat operation from solvent to a waterborne coating. As a result of the waterborne conversion project, the abatement configurations were changed and the REECO Sr. Regenerative Thermal Oxidizer was also permanently shut down.

As required in 30 TAC 122.217(a)(2), we are submitting an application for a Minor Title V Permit Revision to incorporate the permit revisions to NSR 19156. Since the GM Arlington Assembly facility recently renewed the Title V permit O1151 with Mr. Vasant Chaphekar, TCEQ Air Permit Division, GM requests Mr. Chaphekar also perform the Minor Title V Revision.

The application we are filing today contains the required TCEQ forms as well as the appropriate certifications. The following forms are included:

TCEO Form OP-1 Site Summary Information

TCEQ Form OP-2 Application for Permit Revision/Renewal

TCEQ Form OP-CRO1 Certification by Responsible Official

TCEQ Form OP-Mon CAM Addition/Deletions

TCEQ Form OP-SUMR Individual Unit Summary for Revisions

TCEQ Form UA-15 Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes

Please contact me at (817) 652-2453 if you have any questions or require additional information.

Sincerely,

Chris Boehle

Sr. Environmental Engineer Arlington Assembly Plant



## Form OP-CRO1 Certification by Responsible Official Federal Operating Permit Program

All initial permit application, revision, renewal, and reopening submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I. IDENTIFYING INFORMATION	)N								
A. RN: RN102505963	B. CN: 60359	5646	C. Account No.:TA-0157-I						
D. Permit No.: O1151		E. Project No.: NA	l.						
F. Area Name: Arlington Assembly									
G. Company Name: General Motors									
II. CERTIFICATION TYPE (Please mark the appropriate box)									
A. Responsible Official:  B. Duly Authorized Representative:									
III. SUBMITTAL TYPE (Place an	"X" in the appro	priate box) (Only one re	response can be accepted per form)						
SOP/TOP Initial Permit Application	on $\square$	Update to Permit App	plication						
GOP Initial Permit Application		Permit Revision, Rene	newal, or Reopening						
Other:									
IV. CERTIFICATION OF TRUTH	Ţ								
This certification does not extend to	information wh	ich is designated by the	e TCEQ as information for reference only.						
I, Paul D. Graham		, certify that I am the	e RO for this application						
(Certifier Name printed or typ	ed)	, certify that I am the	(RO or DAR)						
period in Section IV.A below, or on the	e specific date(s)	in Section IV.B below,	•						
Note: Enter EITHER a Time Period C not valid without documentation date(s		(s) for each certification	n. This section must be completed. The certification is						
A. Time Period: FromStart Date	* to	End Date*							
OR									
B. Specific Dates: 3/11/13  Date 1* Date 2* Date 3* Date 4* Date 5* Date 6* Date 7* Date 8*  *The Time Period option may only be used when the "Submittal Type" is 'Update to Permit Application' and there are multiple uncertified submittals; or a submittal package has multiple dates recorded in the documentation. Do not use the Time Period option if the "Submittal Type" is 'Other.'									
Signature: Paul error	1								
Title: Plant Manager									



### Texas Commission on Environmental Quality Federal Operating Permit Program Site Information Summary Form OP-1 (Page 1)

Please print or type all information. Direct any questions regarding this application form to the Air Permits Division at (512) 239-1250. Address written inquiries to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division (MC 163), P.O. Box 13087, Austin, Texas 78711-3087.

I.	COMPANY IDENTIFYING INFORMATION												
	A.	Company N	lame:	Genera	1 Motors	LLC							
	В.	Customer R	Referen	ce Numl	per (CN):	CN60	CN603595646						
	C.	Submittal D	Date (m	m/dd/yy	vy):	03/11/	2013						
П.	SITE	INFORMA	ATION										
	A.	Site Name:	Gener	al Moto	rs Arlingt	on Asse	mbly Plan	t					
	В.	Regulated I	Entity I	Referenc	e Number	(RN):	RN1025	05963			****		***
	C.	Primary Ac	count 1	Number	for Site:		TA-0157	7-I	···				
	D.	Indicate aff	ected s	tate(s) re	equired to	review	permit ap	plication:	(Place a	n "X" in	the app	ropriate b	ox[es].)
AR		co		KS		LA		NM		OK		N/A	X
	E. Indicate all pollutants for which the site is a major source based on the site's potential to emit:												
Pollutant VOC NO <sub>X</sub>			SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>10</sub> CO Pb HAPS Other								
Major	at the	Site (YES/N	<i>IO)</i> :	X	X	4-447-24	X			X			
	F.	Is the source	e a nor	n-major s	source sub	ject to t	he Federa	l Operatii	ng Permit	Program	1?	YES	⊠ NO
	G.	Is the site w	vithin a	local pr	ogram are	a jurisd	iction?					⊠ YES	NO
	Н.	Will emissi	ions av	eraging l	e used to	comply	with any	Subpart o	of 40 <b>C</b> FR	R Part 63	?	☐ YES	⊠ NO
	I.	Indicate the averaging:	e 40 <b>C</b> F	R Part 6	3 Subpart	(s) that	will use e	missions					
ш.	PER	MIT TYPE				•							
	Α.	Type of Per	rmit Re	quested	: (Select o	only <u>one</u>	response	and plac	e an "X"	in the bo	x.)		
Site Op	eratin	g Permit (SC	OP) 3	( Ten	nporary O	perating	Permit (7	OP)	Gener	al Opera	ting Perr	nit (GOP)	
IV.	INIT	IAL APPL	ICATI	ON INF	ORMAT	ION (C	omplete f	or Initial	Issuance .	Applicati	ions <u>onl</u> y	:.)	
	Α.	Is this sul	bmittal	an abbro	eviated or	a full aj	plication	?	· 		] Abbrev	iated 🔀 I	Full
	В.	If this is a	a full a	pplicatio	n, is the s	ubmittal	a follow-	up to an	abbreviate	ed applic	ation?	YES	⊠ио
	C.	If this is a Acid Rain				n, is this	an early	submittal	for a con	nbined S	OP and	□ YES	⊠ NO
	D.				ation bee		tted (or is rmation.)	being sul	omitted) to	o EPA?	(Refer	⊠ YES	□NO



# Texas Commission on Environmental Quality Federal Operating Permit Program Site Information Summary Form OP-1 (Page 2)

V.	CONFIDENTIAL INFORMATION								
	A.	Is confidential information:	submitted in conjunct	tion with this applic	ation?	☐ YES ⊠ NO			
VI.	RES	PONSIBLE OFFICIAL (R	O)						
	A.	RO Name: (Mr. Mrs	. Ms. Dr.) Pau	l D. Graham					
	B.	RO Title: Plant Manager		3. MINISTRALIA - 1.4					
	C.	Employer Name: General N	loyer Name: General Motors						
	D.	Mailing Address: 2525 East	t Abram Street						
City: A	Arlingto	on S	State: TX		ZIP Code: 760	)10			
Territo	ry:		Country:		Foreign Postal	Code:			
	E.	Internal Mail Code:	nternal Mail Code:			2222			
	G.	Fax:		il: paul.d.grahar	m@gm.com				
VII. TECHNICAL CONTACT IDENTIFYING INFORMATION (Complete if different from RO.)									
	A. Technical Contact Name: ( Mr. Mrs. Mrs. Dr.) Chris Boehle								
	В.	Technical Contact Title: Sr	. Environmental Eng	ineer					
	C.	Employer Name: General Motors							
	D.	Mailing Address: 2525 East	t Abram Street						
City: A	Arlingto	on	State: TX		ZIP Code: 760	10			
Territo	ry:	(	Country:		Foreign Postal	Code:			
	E.	Internal Mail Code:							
	F.	Delivery Address: SAME							
City:			State:		ZIP Code:				
Territo	ry:		Country:		Foreign Postal Code:				
	G.	Internal Mail Code:		H. Telep	hone: 817-652	-2453			
	I.	Fax: 817-652-2336		J. E-ma	il: chris.boehle	@gm.com			
VIII.	REF	ERENCE ONLY REQUIR	*****	ence only.)					
	A.	State Senator: Wendy Davi	is						
	В.	State Representative: Diane	e Patrick						
	C.	Has the applicant paid emis (Sept. 1 - August 31)?	sions fees for the mo	st recent agency fis	cal year	⊠ YES □ NO □N/A			
	D.	Is the site subject to bilingu	al notice requirement	s pursuant to 30 TA	AC § 122.322?	⊠ YES □ NO			
	E.	Indicate the alternate langua	age(s) in which public	c notice is required	•	Spanish			



# Texas Commission on Environmental Quality Federal Operating Permit Program Site Information Summary Form OP-1 (Page 3)

IX.		OFF-SITE PERMIT REQUEST (Optional for applicants requesting to hold the FOP and records at an off-site location.)						
	$-\frac{(Opi)}{A}$	Office/Facility Name:	0					
	В.	Physical Address:						
City:			State:			ZIP Code:		
Territo	ry:	······································	Country:			Foreign Postal	Code:	
	С.	Physical Location:	on:					
	D.	Contact Name: ( Mr.						
	E.	Telephone:						
X.	APP	LICATION AREA INFO	RMATION					
	A.	Area Name: General Mot	ors Arlington Assei	nbly Plant				
	В.	Physical Address: 2525 E	ast Abram Street					
City: A	Arlingt	ton	State: TX			ZIP Code: 760	010	
	<u>C.</u>							
	<b>D</b> .	Nearest City: Arlington						
	E.	State: Texas F. ZIP Code: 76010						
	G.	Latitude (nearest second): 32 44' 56" H. Longitude (nearest second)					ond): 097 04' 19"	
	I.	Are there any emission units that were not in compliance with the applicable requirements identified in the application at the time of application submittal?						
	J.	Indicate the estimated nun	nber of emission un	its in the appl	ication ar	rea:	10	
	K.	Are there any emission un Program and/or CAIR?	its in the application	n area subject	to the Ac	eid Rain	☐ YES ⊠ NO	
XI.		LIC NOTICE uplete this section for SOP A	Applications and Ac	id Rain Perm	iit Applica	ations <u>only</u> .)		
	Α.	Name of public place to vi	ew application and	draft permit:	TCEQ D	allas/Ft. Worth	Regional Office	
	В.	Physical Address: 2309 G	ravel Drive					
City: F	ort W	orth		ZIP Code:	76118			
	С.	Contact Person (Someone			the publi	c, during the pu	ablic notice period):	
		(Mr. Mrs. Ms. Ms.	Dr.) Chris Boehl	e		· · · · · · · · · · · · · · · · · · ·		
	D.	Contact Mailing Address:						
City: A	rlingt	on	State: TX			ZIP Code:760	10	
Territo	ry:		Country:			Foreign Postal	Code:	
	E.	Internal Mail Code:		F.	Telep	hone: (817) 65	2-2453	
XII.	DEL	INQUENT FEES AND P	ENALTIES					
Notice		s form will not be processe, orney General on behalf of						



## Texas Commission on Environmental Quality Federal Operating Permit Program Site Information Summary Form OP-1 (Page 4)

		ections XIII and XIV for ate of Representation sub		CAIR Peri	nit app	olications <u>only</u> . Please include a copy of			
XIII.	II. DESIGNATED REPRESENTATIVE (DR) IDENTIFYING INFORMATION								
	Α.	, pr							
	В.	DR Title:							
	C.	Employer Name:							
	D. Mailing Address:								
City:			State:	ZIP Code:					
Territo	ry:		Foreign Postal Code:						
	E.	Internal Mail Code:		F.	Telep	phone:			
	G.	Fax:	·	H. E-mail:					
XIV.	AL	TERNATE DESIGNATE	D REPRESENTATIV	E (ADR) II	ENTI	FYING INFORMATION			
	Α.	ADR Name: ( Mr.	Mrs. Ms. Dr.)		.,,				
VIII.2	В.	ADR Title:	A						
	C.	Employer Name:							
	Ð.	Mailing Address:		WIII U					
City:			State:			ZIP Code:			
Territo	ry:		Country:			Foreign Postal Code:			
	E.	Internal Mail Code:		F.	Telep	phone:			
	G.	Fax:	100,000	Н.	E-ma	il:			



## Texas Commission on Environmental Quality Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2 Table 1

Date: 3/11/13	Permit N	No.: O1151		Account No.: TA-0151-I Regu				Regulated En	tity No.: RN102505963	
Area Name: Arlington Assem	bly Plant		Company	Nam	ie: Genera	d Motors		Cust	omer Referenc	ce No.: CN603595646
	-			-						
For Submissions to EPA (SOP renewal, minor revision, and significant revision applications <u>only</u> )										
Has a copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.)										
										· .
I. APPLICATION TYPE										
Indicate the type of application:  Renewal  Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)  Revision Requesting Prior Approval  Response to Reopening										
II. QUALIFICATION STA	TEMEN	Т								
For SOP Revisions Only	The refer	enced chan	ges qualify	for th	e marked 1	evision ty	pe.			⊠ YES □ NO
For GOP Revisions Only	The perm	nitted area c	ontinues to	quali	fy for a GC	OP.				☐ YES ☐ NO
III. MAJOR SOURCE POL	LUTANI	rs (Comple	te this sectio	on if t	he permit	revision is	due to a ch	ange at the	site.)	
Indicate all pollutants for which	the site is	a major so	urce based o	on the	site's pote	ential to en	nit after the	change is o	perated:	
Pollutant	VOC	NO <sub>x</sub>	SO <sub>2</sub> Pl	$\mathbf{M}_{10}$	СО	Pb	HAPs	Other		
Major at the Site (YES/NO):	X	X	X				X			
IV. FEE INFORMATION										
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?										
V. DELINQUENT FEES AND PENALTIES										
	Notice: This form will not be processed until all delinquent fees and/or penalties owed the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.									



# Texas Commission on Environmental Quality Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2 Table 2

Date: 3/11/13	Permit No.: O1151	Account No.: TA-0157-I	Regulated Entity No.: RN102505963
Area Name: Arlington Assem	bly Plant	Company Name: General Motors	Customer Reference No.: CN603595646

I. DES	I. DESCRIPTION OF REVISION									
D		Unit/Group Process			NCD	Description of Changes				
Revision No.	Revision Code	New Unit	ID No.	Applicable Form	NSR Authorization	and Provisional Terms and Conditions				
NA	MS-A	No			19156 (5E)	The BC/CC daily limit changed to 5.2 lbs VOC/gallon due to switching Paint Technology from solvent to waterborne				
NA	MS-A	No			19156 (9C Table)	Added Heated Flash Emission unit to Row 1, Cell 1 and Row 3, Row 1. Heated Flash is needed to remove the water in the Basecoat prior to entering the Clearcoat booth.				
NA	MS-A	No			19156 (11 Table)	Basecoat and Clearcoat Robots were modified and are now Electrostatic Bells.				
NA	MS-A	No			19156 (12 Table)	Coating booth filter requirements were added.				
NA	MS-A	No			19156 (13)	Filter and waterwash requirements were added				
NA	MS-A	No			19156 (14 Table)	The abatement configuration changed due to the waterborne conversion and the elimination of REECO Sr. The Durr Organic Compound Control Efficiency was raised to 87%				
NA	MS-A	No			19156 (14A-J)	RTO Continuous monitoring of the combustion chamber requires a 3-hour average consistent with CAM & NSPS.  Numerous new abatement monitoring requirements added.				
NA	MS-A	No			19156 (16)	Paint shop sealers, primer surfacer and Basecoat/Clearcoat reduced to 85 jph				
NA	MS-A	No			19156	Removed usage restrictions, since facility is regulated by				

			MAERT Table
NA	MS-A	No	19156 (17) Updated Chemical Usage Limitations to current TCEQ requirements
NA	MS-A	No	New stack testing requirements due to abatement changes and waterborne technology implementation.
NA	MS-A	No	19156 (12 D,F,H,I,J,K,M) Recordkeeping requirements added
NA	MS-A	No	MAERT Table Changes to Primer Surfacer system due to booth abated by DURR RTO/Concentrator, Topcoat System revised to replace solventborne abated emissions to waterborne emissions and abated heated flash. New observation zones added, Clearcoat booth now goes to DURR RTO/Concentrator. Sealer automation cell added to plant wide sealers, adhesives & reduction in natural gas usage due to shutting down REECO Sr.



# Texas Commission on Environmental Quality Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2 Table 3

Date: Permit No.:		Permit No.:		Account No.:  Company Name:  Cus		Regulated Entity No.:		
Are	Area Name:		Company Nar			stomer Reference No.:		
I.		NIFICANT REVISION (Complete ificant revision.)	this section if you are	submitting a significant re	vision application	n or a <b>renewal application</b> that includes a		
	Α.	Is the site subject to bilingual requ	irements pursuant to 30	TAC § 122.322?		☐ YES ☐ NO		
	В.	Indicate the alternate language(s) i	n which public notice i	notice is required:				
	C.	Will there be a change in air pollut	tant emissions as a resu	lt of the significant revisio	n?	☐ YES ☐ NO		



# Monitoring Requirements Form OP-MON (Page 1) Federal Operating Permit Program

Table 1a: CAM/PM Additions

I. IDENTIFYING INFORMATION								
A. Account No.: TA-0157-I	B. RN No.: F	RN102505963	C. CN No.:	CN603595646				
D. Permit No.: O1151	E. Project No.: 16	6767	F. Area Name:	Arlington Assembly Plant				
G. Company Name:		General Motors LLC						
II. UNIT/EMISSION POINT/GROUP/PROCESS INFORMATION								
A. Revision No.: ROP Rev 1	B. Unit/EPN/Group/Proc	cess ID No.: PRO	TOPCOAT	C. Applicable Form:				
III. APPLICABLE REGULATORY REQUIREMENT								
A. Name: Subchapter G 12	22.604 & 40 CFR Par	t 64	B. SOP/GOP Index No.:					
C. Pollutant; VOC		D. Main Standard:	: 30	TAC Chapter 122.604				
IV. TITLE V MONITORING INFORM	ATION							
A. Monitoring Type: CAM	B. Unit Size: LO	C. CAM/PM Option No.:						
D. Deviation Limit: Clearcoat Therr average tempera that a	ture over four equally	spaced measure	ement points p	degrees F maintained at a 3-hour per hour established during testing ator temp continuously.				
E. CAM/PM Option No.:								
F. Deviation Limit:								
V. CONTROL DEVICE INFORMATION	V. CONTROL DEVICE INFORMATION							
A. Device ID No.: Dui	r RTO	B. Device Type:	DIRFLM					

Table 1b: CAM/PM Control Device Additions

	EMISSIO	N UNIT	CONTROL DEVICE						
1	A. Unit ID No.:	DURR Carbon	B. Device ID No.:	DURR Carbon	C. Device Type:	CRBAD1			
2	A. Unit ID No.:	DURR RTO	B. Device ID No.:	DURR RTO	C. Device Type:	DIRFLM			
3	A. Unit ID No.:	REECO JR OVEN	B. Device ID No.:	REECO JR	C. Device Type:	DIRFLM			
4	A. Unit ID No.:	REECO JR HF	B. Device ID No.:	REECO JR	C. Device Type:	DIRFLM			
5	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				
6	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				
7	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				
8	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				
9	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				
10	A. Unit ID No.:		B. Device ID No.:		C. Device Type:				

TCEQ-10421 [11/04]

Form OP-MON - This form for use by facilities subject to air quality permit requirements and may be revised periodically [APDG 5234v3]



# Monitoring Requirements Form OP-MON (Page 2) Federal Operating Permit Program

Table 1c: CAM/PM Case-By-Case Additions

I. DENTIFYING INFORMATION	)N				
A. Account No.:  B. RN No.:			C. CN No.:		
D. Permit No.:	E. Project No.:		F. Area N	ame:	
G. Company Name:					
II. UNIT/EMISSION POINT/GR	OUP/PROCESS INFORMATION				E 12
A. Revision No.:	B. Unit/EPN/Group/Process ID No.:	."		C. Applicable Form:	
III. APPLICABLE REGULATOR	Y REQUIREMENT				
A. Name:			B. SOP Index	No.:	
C. Pollutant:		D. Main Standard:			
E. Monitoring Type:		F. Unit Size:			
G. Deviation Limit:					
IV. CONTROL DEVICE INFOR	MATION				
A. Device ID No.:		B. Device	Туре:		
V. CAM CASE-BY-CASE					
A. Indicator:	B. Minimum Frequen	cy:		C. Averaging Period:	
D. QA/QC Procedures:					
E. Verification Procedures:					
F. Representative Data:					
VI. PERIODIC MONITORING	CASE-BY-CASE				
A. Indicator: B. Minimum Frequency:				C. Averaging Period:	
D. Periodic Monitoring Text:					

#### Table 1d: CAM/PM Case-by-Case Control Device Additions

	Table 1d. CAMPIN Case-by-Case Control Device Additions									
	EMISSION UNIT		CONTROL DEVICE							
1	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
2	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
3	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
4	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
5	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
6	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							
7	A. Unit ID No.:	B. Device ID No.:	C. Device Type:							



# Monitoring Requirements Form OP-MON (Page 3) Federal Operating Permit Program

Table 2a: CAM/PM Deletions

I. IDENTIFYING INFORMATION								
A. Account No.: TA-	-0157-i	3. RN No.:	RN102	2505963	C. CN No.	.:	603595646	
D. Permit No.: O	1151 1	E. Project No.:			F. Area Na	ime:	Arlington Assembly Plant	
G. Company Name:			Ge	eneral Mo	otors LLC			
II. UNIT/EMISSION POINT	/GROUP/PROCE	SS INFORMA	TION					
A. Revision No.:	B. Unit/EPN/	Group/Process	ID No.:	PROT	OPCOAT	C. Appli	cable Form:	
III. APPLICABLE REGULAT	ORY REQUIREM	ENT	- E 0.5					
A. Name: 30 TAC Chapter	r 115, Surface C	Coating Oper	ations		B. SOP/GOP	Index No.:		
C. Pollutant: VOC				D. Main S	tandard:		115.423(3)(A)	
IV. TITLE V MONITORING	INFORMATION							
A. Monitoring Type: CAM					В. САМ/РМ	Option No	D.:	
V. CONTROL DEVICE INFO	ORMATION							
A. Device ID No.:	DURF	₹		B. Device	Type: DIR	FLM		
VI. TYPE OF DELETION								
A. Monitoring Requirement:	The second secon	X		B. Contro	l Device:		X	

#### Table 2b: CAM/PM Control Device Deletions

EMISSION UNIT			CONTROL DEVICE					
1	A. Unit ID No.:	DURR RTO	B. Device ID No.:	DURR RTO	C. Device Type:	DIRFLM		
2	A. Unit ID No.:	DURR Carbon	B. Device ID No.:	Durr Carbon	C. Device Type:	CRBAD1		
3	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
4	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
5	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
6	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
7	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
8	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
9	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
10	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			



# Monitoring Requirements Form OP-MON (Page 4) Federal Operating Permit Program

Table 2c: CAM/PM Case-By-Case Deletions

I. IDENTIFYING INFORMATIO	NC								
A. Account No.:	B. RN No.:	C. CN No.:							
D. Permit No.:	E. Project No.:	F. Area Name:							
G. Company Name:									
II. UNIT/EMISSION POINT/GR	II. UNIT/EMISSION POINT/GROUP/PROCESS INFORMATION								
A. Revision No.:	B. Unit/EPN/Group/Process ID No.:	C. Applicable Form:							
III. APPLICABLE REGULATOR	Y REQUIREMENT								
A. Name:		B. SOP Index No.:							
C. Pollutant:	D.	fain Standard:							
IV. TITLE V MONITORING IN	FORMATION								
A. Monitoring Type:									
V, CONTROL DEVICE INFOR	MATION								
A. Device ID No.:		B. Device Type:							
VI. TYPE OF DELETION									
A. Monitoring Requirement:		B. Control Device:							

Table 2d: CAM/PM Case-by-Case Control Device Deletions

EMISSION UNIT			CONTROL DEVICE
1	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
2	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
3	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
4	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
5	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
6	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
7	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
8	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
9	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
10	A. Unit ID No.:	B. Device ID No.:	C. Device Type:



# Monitoring Requirements Form OP-MON (Page 1) Federal Operating Permit Program

Table 1a: CAM/PM Additions

I. IDENTIFYING INFORMATION								
A. Account No.: TA-0157-I	B. RN No.: R	N102505963	C. CN No.:	CN603595646				
D. Permit No.: O1151	E. Project No.: 16	767	F. Area Name:	Arlington Assembly Plant				
G. Company Name:		General Moto	rs LLC					
II. UNIT/EMISSION POINT/GROUP/P	ROCESS INFORMATIO	ON						
A. Revision No.: ROP Rev 1	B. Unit/EPN/Group/Proc	ess ID No.: PRO	OPSURF	C. Applicable Form:				
III. APPLICABLE REGULATORY REQUIREMENT								
A. Name: Subchapter G 12	22.604 & 40 CFR Part	64	B. SOP/GOP It	idex No.:				
C. Pollutant: VOC		D. Main Standard:	dard: 30 TAC Chapter 122.604					
IV. TITLE V MONITORING INFORM	ATION							
A. Monitoring Type: CAM	B. Unit Size: LC	C. CAM/PM Option No.:						
D. Deviation Limit: Primer Surfacer Booth Thermal Oxidizer Minimum operating temperature 1350 degrees F maintained at a 3-hour average temperature over four equally spaced measurement points per hour established during testing that achieves the required DE. Monitor Rotary Concentrator temp continuously								
E. CAM/PM Option No.:								
F. Deviation Limit:								
V. CONTROL DEVICE INFORMATION								
A. Device ID No.: Dui	rr RTO	B. Device Type:	DIRFLM					

Table 1b: CAM/PM Control Device Additions

	EMISSIO	N UNIT	CONTROL DEVICE				
1	A. Unit ID No.:	DURR Carbon	B. Device ID No.:	DURR Carbon	C. Device Type:	CRBAD1	
2	A. Unit ID No.:	DURR RTO	B. Device ID No.:	DURR RTO	C. Device Type:	DIRFLM	
3	A. Unit ID No.:	REECO JR -OVEN	B. Device ID No.:	REECO JR	C. Device Type:	DIRFLM	
4	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		
5	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		
6	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		
7	A. Unit 1D No.:		B. Device ID No.:		C. Device Type:	·	
8	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		
9	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		
10	A. Unit ID No.:		B. Device ID No.:		C. Device Type:		



# Monitoring Requirements Form OP-MON (Page 2) Federal Operating Permit Program

Table 1c: CAM/PM Case-By-Case Additions

I. IDENTIFYING INFORMATION  A. Account No.:  B. RN No.:  C. CN No.:			
A. Account No.: C. CN No.:			
D. Permit No.: E. Project No.: F. Area Name:			
G. Company Name:			
II. UNIT/EMISSION POINT/GROUP/PROCESS INFORMATION			
A. Revision No.: B. Unit/EPN/Group/Process ID No.: C. Applicable	Form:		
III. APPLICABLE REGULATORY REQUIREMENT			
A. Name: B. SOP Index No.:			
C. Pollutant: D. Main Standard:	D. Main Standard;		
E. Monitoring Type: F. Unit Size:	F. Unit Size;		
G. Deviation Limit:			
IV. CONTROL DEVICE INFORMATION			
A. Device ID No.:  B. Device Type:			
V. CAM CASE-BY-CASE			
A. Indicator: B. Minimum Frequency: C. Averaging P	eriod:		
D. QA/QC Procedures:			
E. Verification Procedures:			
F. Representative Data:			
VI. PERIODIC MONITORING CASE-BY-CASE			
A. Indicator: B. Minimum Frequency: C. Averaging P	Period:		
D. Períodic Monitoring Text:			

Table 1d: CAM/PM Case-by-Case Control Device Additions

EMISSION UNIT		CONTROL DEVICE
1 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
2 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
3 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
4 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
5 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
6 A. Unit ID No.:	B. Device ID No.:	C. Device Type:
7 A. Unit ID No.:	B. Device ID No.:	C. Device Type:

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# Monitoring Requirements Form OP-MON (Page 3) Federal Operating Permit Program

Table 2a: CAM/PM Deletions

I. ID	DENTIFYING INFO	ORMATION						
А. А	Account No.:	TA-0157-I	B. RN No.:	RN102	2505963	C. CN No	1.:	CN603595646
D. P	Permit No.:	O1151	E. Project No.:			F. Area Na	ame:	Arlington Assemlby Plant
G. C	Company Name:			G	eneral Mo	otors LLC		
п. ι	JNIT/EMISSION I	POINT/GROUP/PR	OCESS INFORMA	TION				
A. R	Revision No.:	B. Unit/	/EPN/Group/Process	: ID No.:	PRO	PSURF	C. Applic	cable Form:
Ш. А	APPLICABLE REC	CULATORY REQUI	REMENT					
A. N	Vame: 30 TAC Cl	hapter 115, Surfa	nce Coating Oper	rations		B. SOP/GOP	Index No.:	R5421-8-2
C. P	Pollutant: VOC				D. Main S	tandard:		115.423(3)(A)
IV.	TITLE V MONITO	ORING INFORMAT	FION					
A. N	Monitoring Type:	CAM	and the state of t	11.000000000000000000000000000000000000		в. сам/рм	Option No	).;
v. c	ONTROL DEVIC	E INFORMATION						
<b>A</b> . E	Device ID No.:	D	URR		B. Device	Type: DIR	RFLM	
VI.	TYPE OF DELETI	ON						
A. N	Monitoring Requiren	nent:			B. Control	l Device:	energy and the second s	X

#### Table 2b: CAM/PM Control Device Deletions

	EMISSION	UNIT	CONTROL DEVICE					
1	A. Unit ID No.:	DURR Carbon	B. Device ID No.:	DURR Carbon	C. Device Type:	CRBAD1		
2	A. Unit ID No.:	DURR RTO	B. Device ID No.:	DURR RTO	C. Device Type:			
3	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
4	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
5	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
6	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
7	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
8	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
9	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			
10	A. Unit ID No.:		B. Device ID No.:		C. Device Type:			



# Monitoring Requirements Form OP-MON (Page 4) Federal Operating Permit Program

Table 2c: CAM/PM Case-By-Case Deletions

I. IDENTIFYING INFORMATIO	DN		
A. Account No.:	B. RN No.:	C. CN No.:	
D. Permit No.:	E. Project No.:	F. Area Name:	
G. Company Name:			
II. UNIT/EMISSION POINT/GF	ROUP/PROCESS INFORMATION		
A. Revision No.:	B. Unit/EPN/Group/Process ID No.:	C. Applicable Form:	
III. APPLICABLE REGULATOR	Y REQUIREMENT		
A. Name:		B. SOP Index No.:	
C. Pollutant:	D.	Main Standard:	
IV. TITLE V MONITORING IN	FORMATION		
A. Monitoring Type:			
V. CONTROL DEVICE INFOR	MATTON		
A. Device ID No.:		B. Device Type:	
VI. TYPE OF DELETION			
A. Monitoring Requirement:		B. Control Device:	

Table 2d: CAM/PM Case-by-Case Control Device Deletions

	EMISSION UNIT	CONT	ROL DEVICE
1	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
2	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
3	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
4	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
5	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
6	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
7	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
8	A. Unit ID No.:	B. Device ID No.:	C. Device Type:
9	A. Unit ID No.:	B. Device ID No.;	C. Device Type:
10	A. Unit ID No.:	B. Device ID No.:	C. Device Type:

#### APPENDIX 1 To Form OP-MON

### I. Evaluation of CAM Plan Requirements for the Arlington Assembly Plant

Compliance Assurance Monitoring (CAM) under 40 CFR Part 64 for major stationary sources applies to pollutant-specific emissions units at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria: 1.) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emission limitation or standard that is exempt under 40 CFR part 64, section 64.2 (b)(1), 2.) The unit uses a control device to achieve compliance with any such emission limitation or standard; and 3.) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

To provide reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, monitoring shall meet the following general criteria: 1.) The owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance, 2.) The owner or operator shall establish appropriate range(s) or designated conditions(s) for the selected indicators such that operation within the range provides reasonable assurance of ongoing compliance with emission limitations or standards over the anticipated range of operating conditions, and 3.) The design of indicator ranges or designated conditions may be based on a single maximum or minimum value, may be expressed as a function of process variables, may be expressed as a particular operational status or condition, or may be interdependent between more than one indicators.

The monitoring plan shall include a justification for the proposed elements of the monitoring plan and, if different from the manufacturer recommendations, an explanation of the reasons for the differences shall be discussed. If the monitoring plan relies on presumptively acceptable monitoring, no further justification for the appropriateness of that monitoring should be necessary.

For the Arlington Assembly facility, there are two emission units that have potential volatile organic compounds (VOC's) emissions greater than the major source level prior to control and thus are subject to CAM under 40 CFR part 64. These emission points are PROPSURF and PROTOPCOAT. Elements of the CAM plan are currently included in the site's Part 70 Operating Permit, Permit No. O1151

#### II. CAM Plan for Emission Units PROPSURF and PROTOPCOAT

### A. Emission Unit Descriptions:

- 1. PROPSURF The application and curing of the primer surfacer coating. The VOC is exhausted through two thermal oxidizers at Emission Points EPN 530 (automatic application zones) and EPN 321 (oven). The performance of the control devices is a function of the oxidizer temperature.
- PROTOPCOAT The application and curing of the Topcoat (Basecoat/Clearcoat) coatings.
   The VOC from the Basecoat Heated Flash is exhausted through Emission Points EPN 321.

   The VOC from the Clearcoat Booth is exhausted through Emission Point EPN 530. Emissions from the Topcoat Oven (Basecoat & Clearcoat) is exhausted through EPN 321.

#### B. Applicable Requirements for CAM

Emission Unit	Permit Citation	Requirement
PROPSURF	30 TAC 116	Emission Rate Limit 34.80 pounds per hour
	NSR Permit 19156 MAERT	and 64.76 tons per year
PROTOPCOAT	30 TAC 116	Emission Rate Limit 264.00 pounds per hour
	NSR Permit 19156 MAERT	and 411.08 tons per year
V v v v v v v v v v v v v v v v v v v v	NSR Permit 19156 Condition 5.E.	The BC/CC VOC content is further limited on a daily basis to 5.2 lbs VOC/gal solids applied

#### C. Pollutant Subject to CAM for this Emission Point: VOC

#### D. Background

The EPA/Auto Protocol (EPA 450/3-88-018) specifies procedures for testing the destruction efficiency performance of oxidizers. Testing results using the Protocol's procedures demonstrate that the oxidizer operating temperature is an appropriate parameter to use as an indicator of VOC efficiency performance of oxidizers. A specified minimum temperature, therefore, can be used to initiate a process review and any necessary follow-up action.

The plant's VOC emissions performance is a function of several factors used to determine compliance. Thus, a change in operation of the oxidizer does not, by itself, indicate non-compliance with VOC emission limits.

From the performance tests, a credit is established for the VOC emissions reduction from the oxidizer. This oxidizer VOC emissions credit is one element in the equation (e.g., combined with other coating system control elements, such as paint application transfer efficiency, low VOC paint) used to determine the plant's VOC emissions performance. Thus, an apparent drop in oxidizer operating temperature below a specified level does not, by itself, indicate non-compliance with the VOC emission limits. A significant temperature drop, however, is an indication of a change in operation of the oxidizer that may have an adverse impact on performance of the control device.

#### Appendix 1 page 3 of 4

Permit 19156 Condition 14 requires that all oxidizers operate at a minimum temperature of 1350 degrees F. Specifying an indicator temperature level for the oxidizer is also supported in the existing Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations (NSPS) in 40 CFR Part 60, Subpart MM. Additionally, each oxidizer also has an Organic Compound Control Efficiency. Emission point 530 (Durr RTO/Concentrator) requires an overall efficiency of 87% and Reeco Jr. RTO requires a Destruction Efficiency of 95%.

## E. Monitoring Approach

The following permit conditions from the existing NSR permit contain the elements of the CAM plan for this emissions unit

CAN	M Plan Elements t	o be Included in the Part 70 Operating Permit			
Emission Unit	Permit 19156	A. Each RTO shall be equipped with a monitor that			
PROPSURF and	Condition 14	continuously monitors the combustion chamber			
PROTOPCOAT	A.	temperature in the RTO combustion chamber (or in the			
		duct immediately downstream of the combustion chamber			
		before any substantial heat exchange occurs) and shall be			
•		accurate to within $\pm 2.5$ degrees Celsius or $\pm 0.75\%$ of the			
		temperature being measured. The temperature data			
***		recording shall consist of measurements made at equally			
		spaced intervals, not to exceed 15 minutes per interval.			
		The temperature shall be maintained at a 3-hour average			
		temperature over four equally spaced measurement points			
		per hour established during testing that achieves the required destruction efficiency. When averaging, an			
		arithmetic or integrated average of all data may be used.			
		The monitor shall be calibrated at least semiannually or in			
		accordance with the manufacturer's specifications,			
		whichever is greater.			
Emission Unit	Permit 19156	The rotary concentrator shall be equipped with a monitor			
PROPSURF and	Condition 14	that continuously measures the gas temperature in the			
PROTOPCOAT	В.	desorption stream.			

- 1. Indicator Range and Data Collection (Satisfies Section 64.4(a)(1)-(2))
  - a. Indicator Range Investigation and corrective action will be triggered if the minimum temperature is less than 1350 degrees F for a 3-hour average temperature over four equally spaced measurement points per hour
  - b. Data Collection In terms of temperature, thermocouples are used to continuously monitor the oxidizer combustion temperature. This temperature monitoring requirement is specifically addressed in the facility's Part 70 Operating Permit as stated in the table above.
  - c. Detecting Bypass (Section 64.4(a)(2)) Per NSR special condition 14 I., when a bypass condition occurs, the system alarms shall be monitored to verify that the dampers have returned to a closed position as soon as practicable after each control system bypass.
- 2. Performance Criteria (Satisfies Section 64.4(a)(3)-(4))

### a. Monitoring Frequency and Averaging:

The Part 70 Operating Permit requires the temperature to be monitored continuously and the temperature recorded continuously (i.e., at least every 15 minutes), and the rotary concentrator shall be equipped with a monitor that continuously measures the gas temperature in the desorption gas stream.

#### b. QA/QC Procedures:

The continuous temperature monitoring equipment shall be calibrated in accordance with the requirements of 40 CFR Part 60.394(b) to ensure continued validity of the recorded data.

### F. Recordkeeping

Records relevant to the above requirements currently specified by the Title V operating permit will be maintained at the site. The Part 70 Operating Permit requires the facility to keep a file on all required monitoring data and support information for five years from the date of the monitoring sample, measurement, report or application.

The specific recordkeeping requirements for this proposed CAM plan are:

Continuously recording (i.e. at least every 15 minutes) the incinerator combustion temperature during coating operations.

### G. Justification (Satisfies Section 64.4(b))

Temperature monitoring for the destruction of VOC by an incinerator is a widely accepted method of monitoring. Therefore, the requirement to monitor temperature and maintain appropriate records is a reasonable method of assuring VOC destruction efficiency for a CAM plan. Combined with the other factors noted above that are pertinent to compliance, this CAM plan provides a reasonable assurance of compliance with the applicable emission limitations.

The monitoring plan described above and currently part of the Operating Permit O1151 satisfies the requirements of CAM for Emission Units PROPSURF and PROTOPCOAT as defined in 40 CFR part 64 and summarized in paragraphs 2 and 3 of this Appendix 1. If you have any questions or need additional information, please contact Nick Ramos at (248) 881-6896 or Chris Boehle at (817) 652-2453.



# Texas Commission on Environmental Quality Federal Operating Permit Program Individual Unit Summary for Revisions Form OP-SUMR Table 1

Date: 3/11/13	Regulated Entity No.: RN102	2505963	Permit No.: 01151
Company Name: General Motors LLS		Area Name: General Motors LLC Arlin	gton Assembly

· · · · · · · · · · · · · · · · · · ·	Unit/Process				Preconstruction Authorizations		
AI	Revision No.	ID No.	Applicable Form	Name/ Description	CAM	30 TAC Chapter 116/30 TAC Chapter 106	Title I
A	1	EPN 530	UA-15	Durr	Y	19156	
D	1	EPN 320	NA	Reeco Sr		19156	
Α	1	EPN 321	UA-15	Reeco Jr	Y	19156	
							· · · · · · · · · · · · · · · · · · ·
	-						



# Texas Commission on Environmental Quality Federal Operating Permit Program Individual Unit Summary for Revisions Form OP-SUMR Table 2

Date:	3/11/13	Regulated Entity No.: RN10	2505963	Permit No.: O1151
Company I	Name: General Mot	ors LLS	Area Name: General Motors LLC Arlin	gton Assembly

Revision No.	ID No.	Applicable Form	Group AI	Group ID No.	Plant AI	Plant ID No.
		<u>`</u>				

TCEQ-10344 - (Revised 04/10) OP-SUMR I This form is for use by sources subject to air quality permit requirements and may be revised periodically. (APDG-5207v2)



# Texas Commission on Environmental Quality Federal Operating Permit Program Individual Unit Summary for Revisions Form OP-SUMR

Table 3: Acid Rain and Clean Air Interstate Rule (CAIR)

Date: 3/11/13	Regulated Entity No.: RN102505963	Permit No.: 01151
Company Name: General Motors LLS	Area Name: General Motors LLC Arlington Assembly	Affected Source Plant Code:

Unit ID No.	Applicable Form	COR Unit ID No.	Acid Rain	CAIR	Status	COR
4						



# Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes Form OP-UA15 (Page 1) Federal Operating Permit Program

Table 1a: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)

Subchapter A: Visible Emissions

Date:3/11/2013	Permit No.:O1151	Regulated Entity No.:RN102505963
Area Name: General Motors LLC Arlin	gton Assembly Plant	Customer Reference No.: CN603595646

Emission Point ID No.	SOP/GOP Index No.	Alternate Opacity Limitation	AOL ID No.	Vent Source	Opacity Monitoring System	Construction Date	Effluent Flow Rate
EPN 530	Primer Surfacer Booth, Clearcoat Booth & Clearcoat Observation	No		Other	None		`470,000 acfin
EPN 321	Primer Surfacer Oven, Basecoat Heated Flash & Topcoat Oven	NO		Other	None		`234,000 acfm
		-					
			era Brown or				
			***************************************				

TCEQ-10046 (Revised 03/09) OP-UA15 Form This form is for use by facilities subject to air quality permit requirements and may be revised periodically. (APDG 5168v38)

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